

DATA STORAGE SYSTEM WITH IMPROVED
NETWORK INTERFACE

ABSTRACT OF THE DISCLOSURE

5 A data storage system has a backplane, processing circuitry and a NIC. The processing circuitry is physically connected to the backplane, and can perform block-based data access operations. The NIC has a first port that couples to an external network, a second port that physically connects to the backplane, and control circuitry interconnected between the first port and the second port. The control circuitry can (i) receive file-based communications from the external network through the first port and provide block-based communications to the processing circuitry through the second port and the backplane in response to the file-based communications, (ii) receive block-based communications from the processing circuitry through the second port and the backplane and provide file-based communications to the external network through the first port in response to the block-based communications, and (iii) provide application server resources to operate as an application server that runs application-level programs.

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